

What is claimed is:

1. A method for producing a titanium oxide, which comprises the steps of:

(1) mixing together or sequentially a titanium compound,  
5 a base and a foaming agent, wherein the hydroxyl group provided by the base is in a molar amount of about 2.1 times to about 3 times of the titanium atom in the titanium compound; and

10 (2) calcining a solid resulting from said mixing together or sequentially of said titanium compound, said base and said foaming agent.

2. The method according to claim 1, wherein the titanium compound is at least one compound selected from a titanium trichloride, a titanium tetrachloride, a titanium oxychloride, a titanium sulfate, a titanium oxysulfate, a titanium tetramethoxide, a titanium tetraethoxide, a titanium tetra-i-propoxide, a titanium tetra-n-propoxide, a titanium tetra-n-butoxide, a titanium tetra-i-butoxide, a titanium tetra-sec-butoxide, a titanium-t-butoxide, a 20 titanium tetra-octadecyloxide, a titanium tetrakis(2-ethylhexyloxide), a titanium tetrastearoyloxide, a titanium dimethoxydibutoxide and a titanium diethoxydipropoxide.

3. The method according to claim 1, wherein the foaming agent is at least one agent selected from a peroxide

compound, an azo compound, a nitroso compound, an azide compound, an amino acid and a polyol compound.

4. The method according to claim 1, wherein the foaming agent is a peroxide compound.

5. The method according to claim 1, comprising the steps of:

(i) mixing the foaming agent with the titanium compound;

10 (ii) continuously adding the base and the mixture of the titanium compound with the foaming agent to a container from distinct routes, while stirring the contents in the container; and

(iii) calcining a solid resulting from step (ii).

6. The method according to claim 1, wherein the base, the foaming agent and the titanium compound are mixed together at a temperature of at most about 65 °C.

7. The method according to claim 1, further comprising the step of aging the solid before the calcination thereof.

20 8. The method according to claim 1, wherein said aging is conducted in the presence of a base.